with conservative management in these patients. Thus, it appears that most patients receiving thrombolytic therapy can be successfully managed without the need for routine coronary angioplasty unless they have symptoms or objective evidence of recurrent ischemia.

At this time there are no definitive data that would show the superiority of one thrombolytic agent over another in terms of improving survival or left ventricular function in patients with acute myocardial infarction. Although the TIMI phase I trial showed that, compared with streptokinase therapy, administering intravenous tissue plasminogen activator achieved a higher incidence of coronary artery patency 90 minutes after it was started, a New Zealand trial failed to show that giving tissue plasminogen activator was better than administering streptokinase in improving overall left ventricular function. It should be noted that both of these trials involved relatively small numbers of patients. Currently there are several large ongoing studies comparing the relative benefit of various thrombolytic agents on survival.

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Reducing Morbidity and Mortality Due to Asthma

DESPITE MAJOR ADVANCES in the understanding of its pathogenesis and the availability of a large number of drugs, morbidity and mortality due to asthma appear to be on the rise. Although the reasons for this disturbing paradox are unclear, there are certain broad treatment guidelines that, if diligently followed, will help to reduce the growing menace of asthma.

Although patients of any age, sex, and race can die of asthma, the disease more frequently ravages socioeconomically handicapped members of the society. In the United States blacks have a higher incidence of death from asthma than whites. Adults older than 65 years and children between the ages of 10 and 14 years are particularly susceptible. Persons with specific immunoglobulin E antibodies to common inhalant allergens are at an increased risk for acute severe attacks of asthma. Most of the patients who die of asthma have a history of severe, poorly controlled disease with poor compliance. Many of these patients also have emotional ailments, particularly depression, isolation, and problems of self-image.

Physicians often fail to realize that there is generally a poor correlation between the symptoms of asthma and the degree of airway obstruction. Patients, on the other hand, commonly develop a tolerance to their symptoms. Thus, there is a failure on the part of both physician and patient to appreciate the severity of bronchial narrowing. Educating patients about recognizing important symptoms and emphasizing the necessity of monitoring airway obstruction by peak flow measurements are the basic steps towards controlling asthma. More often than not, patients can be persuaded to buy a flow meter. Physicians who take care of asthma patients should not only have a peak flow meter on their desk but should also have easy access to a pulmonary function laboratory.

One of the problems related to asthma therapy lies in the way the treatment is delivered to the airways. Although the inhaled route is an effective way of delivering bronchodilators, surveys have shown that more than 50% of patients prescribed an aerosol inhaler used it incorrectly. Furthermore, other studies have revealed that physicians often do a less than satisfactory job of instructing their patients on how to use inhalers. The problem of poor coordination can now be corrected by using spacers and newly developed breath-actuated inhalers. These devices are of particular help in very young and elderly patients who find it hard to use metered-dose inhalers.

Although the treatment of asthma should be tailored to the needs of individual patients, inhaled selective β_2-adrenergic agents constitute the first line of therapy in chronic asthma. When a properly administered β_2-adrenergic drug—including the use of spacers and breath-actuated inhalers—does not provide effective relief of bronchospasm, aerosolized corticosteroids should be prescribed to suppress the airway inflammation that appears to underlie the severe bronchial hyperreactivity of asthma. If used effectively, this combination not only produces maximum improvement in peak flow rates but also cuts down the need for parenteral steroids. Patients who do not respond to the β_2-adrenergic drugs and aerosolized corticosteroids combination deserve a trial of cromolyn sodium. This prophylactic agent is particularly useful for young patients with asthma who are known to have allergies and exercise-induced asthma. Recent studies have found that cromolyn sodium reduces bronchial hyperreactivity in adult patients with asthma as well.

In summary, the rising tide of morbidity and death in asthma can be countered by recognizing high-risk patients, by accurately assessing the severity of airway obstruction, by properly delivering bronchodilators in the airway, and by prescribing cromolyn sodium and corticosteroids judiciously.

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Treatment of Small-Cell Lung Cancer

MANY COMBINATION chemotherapy regimens have activity in patients with small-cell lung cancer. In contrast to the treatment of non-small-cell lung cancer, surgical excision is not generally recommended for patients with small-cell lung cancer because of the propensity for distant spread of the